Amendments to the Specification:

Paragraph [0002] has been amended as follows:

--Carbon dioxide absorption is important in many fields, especially where a person's exhaled breath is being recycled as in certain types of underwater and emergency rescue operations and, especially, anaesthesia, more especially low flow and closed circuit anaesthesia. Chemical absorption is frequently employed, generally using sodalime or, more recently, enhanced formulations based on sodalime, e.g., one using calcium or ~~magnisium~~ magnesium chloride to increase sodalime's absorption capacity, or using an alkali metal-free formulation, e.g., one based on calcium hydroxide and calcium chloride. Formulations free from alkali metal hydroxides have an advantage in anaesthesia in that they have a lower tendency to produce toxic volatile degradation products when fluorinate anaesthetics, for example sevoflurane and desflurane, are used.--

Paragraph [0010] has been amended as follows:

--It has been found, however, that the separation factor, or membrane selectivity, of the supported liquid membranes reported by Teramoto to be good in a CO_2/CH_4 system is not entirely satisfactory in a mixture of CO_2 in certain other gases. This appears to be because the permeation rate of other gases, for example, N_2O, which should remain in the gas mixture retentate, is such that unacceptable losses through the membrane

occur. ~~Especial~~ Special difficulties arise when the stream is a certain type of low flow or closed circuit anaesthetic stream.--

Paragraph [0036] has been amended as follows:

--The final column of the table shows clearly the substantial proportional increase in desired separation of CO_2 over unwanted loss of N_2O between 4 and 4.5 $mol.dm^{-1}$ concentrations, this being maintained almost to the highest concentration tested. The example above shows that the carrier species at the concentrations used readily gives an [[a]] α of from 15 to 20 under the test conditions. However, as can be seen from the second column of the table, the CO_2 permeation rate and α value begin to fall when the concentration exceeds about 6 $mol.dm^{-3}$.--